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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,279	01/22/2004	Masahiro Fushimi	03500.013494.2	3177

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EXAMINER

SANTIAGO, MARICELI

ART UNIT PAPER NUMBER

2879

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/761,279	FUSHIMI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mariceli Santiago	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/301,583.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/22/2004</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Claims 1-19 are pending in the instant application.

Claims 1-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 13, 2006.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 12 and 17-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6-9 of U.S. Patent No. 6,506,087. Although the conflicting claims are not identical, they are not patentably distinct from each other as stated above.

U.S. Application SN 10/761,279	U.S. Patent No. 6,506,087
<p>Claim 12 states a method of manufacturing an image forming apparatus having an envelope made of members inclusive of a first substrate and a second substrate disposed at a space being set therebetween, image forming means and spacers disposed in the envelope, the spacers maintaining the space, the method comprising the steps of:</p> <p>forming a first conductive film on surfaces of a spacer base member and forming a second conductive film on an end portion of the spacer base member corresponding in position to abutting portion upon the first or second substrate, the second conductive film having a resistance lower than a resistance of the first conductive film;</p> <p>cutting the spacer base member formed with the first and second conductive films to form a spacer having a desired shape; and</p> <p>abutting the spacer upon the first or second substrate.</p>	<p>Claim 6 recites a method of manufacturing an image forming apparatus having an envelope made of members inclusive of a first substrate and a second substrate with a space therebetween, an image forming means, and at least one plate spacer disposed in the envelope, the plate spacer having an abutting portion and maintaining space between the first substrate and the second substrate, the method comprising the steps of:</p> <p>forming a first conductive film on surfaces of a spacer base member and forming a second conductive film on an end portion of the spacer base member position to the abutting portion, the second conductive film having a resistance lower than a resistance of the first conductive film;</p> <p>cutting the spacer base member having the first and the second conductive films formed thereon; and</p> <p>abutting the abutting portion against the first or the second substrate.</p>
<p>Claim 17 states wherein the first substrate is formed with electron emitting elements and the second substrate is formed with an image forming member for forming an image when electrons are applied from the electron emitting elements.</p>	<p>Claim 7 recites substantially the same limitation of claim 17.</p>
<p>Claim 18 states wherein the first substrate is formed with a plurality of electron emitting elements wired in a matrix form by a plurality of row and column wiring leads and the second substrate is formed with an acceleration electrode for accelerating electrons emitted from the electron emitting elements and a fluorescent member for emitting light when electrons are applied from the electron emitting elements.</p>	<p>Claim 8 recites substantially the same limitation of claim 18.</p>

Claim 19 states wherein the spacer is abutted upon the row or column wiring lead and upon the acceleration electrode.	Claim 9 recites substantially the same limitation of claim 19.
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### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Lowe (US 5,561,343).

Regarding claim 13, Lowe discloses a method of manufacturing an image forming apparatus having an envelope made of members inclusive of a first substrate and a second substrate disposed at a space being set therebetween, image forming means and spacers disposed in the envelope, the spacers maintaining the space, and each having a conductive film at an abutting portion upon the first or second substrate, the method comprising the steps of: immersing an end portion of a spacer base member (530) into solution containing conductive substances (540) to transfer the solution to the spacer base member (Fig. 6, reservoir of molten metal solution), heating the conductive substances to form the conductive film (64), and abutting the end portion of the spacer base member formed with the conductive film upon the first or second substrate (Fig. 6).

Regarding claim 17, Lowe discloses a method wherein the first substrate (20) is formed with electron emitting elements (80) and the second substrate (10) is formed with an image forming member (130, 140, 150) for forming an image when electrons are applied from the electron emitting elements.

Regarding claim 18, Lowe discloses a method wherein the first substrate is formed with a plurality of electron emitting elements wired in a matrix form by a plurality of row and column wiring leads (Fig. 2) and the second substrate is formed with an acceleration electrode (70) for accelerating electrons emitted from the electron emitting elements and a fluorescent member (130, 140, 150) for emitting light when electrons are applied from the electron emitting elements.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowe (US 5,561,343) in view of Roman et al. (US 5,721,050).

Regarding claim 15, Lowe discloses a method of manufacturing an image forming apparatus having an envelope made of members inclusive of a first substrate and a second substrate disposed at a space being set therebetween, image forming means and spacers disposed in the envelope, the spacers maintaining the space, and each having a conductive film at an abutting portion upon the first or second substrate, the method comprising the steps of: immersing an end portion of a spacer base member (530) into solution containing conductive substances (540) to transfer the solution to the spacer base member (Fig. 6, reservoir of molten metal solution), heating the conductive substances to form the conductive film (64), and abutting the end portion of the spacer base member formed with the conductive film upon the first or second substrate (Fig. 6). Lowe discloses the use of a continuous fibre as the spacer base member, however, is silent in regards to the limitation of the spacer base member formed by

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heating/drawing. In the same field of endeavor, Roman discloses a conventional method of manufacturing a spacer base member by means of heating/drawing a continuous fibre, the spacers being obtained from cutting the thus formed fibre to the desired length. Accordingly, one skilled in the art at the time the invention was made would reasonable contemplate the use of the heating/drawing step disclosed by Roman in the method of Lowe in order to obtain a continuous fibre which can be further used as a base spacer member to obtain spacers of a desired size.

Regarding claim 17, Lowe discloses a method wherein the first substrate (20) is formed with electron emitting elements (80) and the second substrate (10) is formed with an image forming member (130, 140, 150) for forming an image when electrons are applied from the electron emitting elements.

Regarding claim 18, Lowe discloses a method wherein the first substrate is formed with a plurality of electron emitting elements wired in a matrix form by a plurality of row and column wiring leads (Fig. 2) and the second substrate is formed with an acceleration electrode (70) for accelerating electrons emitted from the electron emitting elements and a fluorescent member (130, 140, 150) for emitting light when electrons are applied from the electron emitting elements.

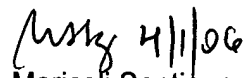
### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mariceli Santiago  
Primary Examiner  
Art Unit 2879